

## ABSTRACT OF THE DISCLOSURE

A method and system are presented for a frame handler, interfacing a SONET communications network to a computer processor. The highly parallel architecture of the frame handler allows it to operate in non-blocking mode – i.e., it can perform add/drop modifications to an incoming frame and begin re-transmission of the frame before the last incoming byte is received. This reduces latency to much less than that of a conventional frame handler, which must buffer the entire frame before re-transmitting it. Furthermore, the cost of the frame handler is reduced, since there is no requirement for large amounts of high-speed memory in which to store the frame. The frame handler is configurable to handle various STS-n frame sizes, and communication protocols.